

IN THE CLAIMS:

Claims 1, 3-5, 10-13, and 17-173 have been amended herein. All of the pending claims 1 through 173 are presented below. This listing of claims will replace all prior versions and listings in the application. Please enter these claims as amended.

1. (Currently Amended) A card comprising:
a substrate including a first side having a plurality of conductors, ~~having~~ a second side having a plurality of contacts connected to at least one conductor of the plurality of conductors on the first side, at least one encapsulated semiconductor component on the first side, a molded peripheral portion laterally outwardly forming a periphery of the substrate, and at least one exposed connecting segment exposed at one of the periphery of the substrate and an intermediate region of the periphery of the substrate.
2. (Original) The card of claim 1, further comprising a notch in the periphery of the substrate to recess a portion of the exposed at least one connecting segment to a nonprotruding position.
3. (Currently Amended) The card of claim 1, wherein a portion of the at least one encapsulated semiconductor component abuts a portion of the molded peripheral portion along an interface thereof.
4. (Currently Amended) The card of claim 3, wherein an abutting portion of the molded peripheral portion is coplanar with the portion of the at least one encapsulated semiconductor component.
5. (Currently Amended) The card of claim 1, wherein ~~the~~ encapsulation material of the at least one encapsulated semiconductor component and ~~the~~ molding material of the molded peripheral portion comprise epoxy resin.

6. (Original) The card of claim 1, wherein the substrate comprises a reinforced organic polymer resin.
7. (Original) The card of claim 1, wherein the second side of the substrate is substantially exposed.
8. (Original) The card of claim 1, wherein the at least one semiconductor component comprises a memory component.
9. (Original) The card of claim 1, wherein the card comprises a memory card for digitally recording and retrievably storing photographic data in a digital camera.
10. (Currently Amended) A card comprising:
a printed circuit substrate including a first side having a plurality of conductors, ~~having~~ a second side having a plurality of contacts connected to at least one conductor of the plurality of conductors on the first side, at least one encapsulated semiconductor component on the first side, a molded peripheral portion laterally outwardly forming a periphery of the substrate, and at least one exposed connecting segment exposed at one of the periphery of the substrate and an intermediate region of the periphery of the substrate.
11. (Currently Amended) The card of claim 10, further comprising a notch in the periphery of the printed circuit substrate to recess a portion of the ~~exposed~~ at least one exposed connecting segment to a nonprotruding position.
12. (Currently Amended) The card of claim 10, wherein a portion of the at least one encapsulated semiconductor component abuts a portion of the molded peripheral portion along an interface thereof.

13. (Currently Amended) The card of claim ~~10~~, 12, wherein an abutting portion of the molded peripheral portion is substantially coplanar with the portion of the at least one encapsulated semiconductor component.

14. (Original) The card of claim 10, wherein the printed circuit substrate comprises a reinforced organic polymer resin.

15. (Original) The card of claim 10, wherein the second side of the printed circuit substrate is substantially exposed.

16. (Original) The card of claim 10, wherein the at least one semiconductor component comprises a memory component.

17. (Currently Amended) The card of claim 10, wherein the ~~printed circuit card~~ comprises a memory card for digitally recording and retrievably storing photographic data in a digital camera.

18. (Currently Amended) A method for fabricating a card having a substrate having a circuit side and a back side, ~~said the~~ substrate generally separated from a surrounding frame by a peripheral opening spanned by at least one connecting segment between ~~said the~~ substrate and ~~said the~~ frame, ~~said the~~ substrate having at least one electrical circuit and at least one connector for communicating between ~~said the~~ at least one electrical circuit and an external circuit, comprising:

clamping ~~said the~~ substrate and ~~said the~~ frame between a first plate and a second plate of a first molding assembly forming a first mold cavity for injecting a first material into ~~said the~~ first mold cavity for molding a first plastic casting onto ~~said the~~ circuit side of ~~said the~~ substrate and encapsulating ~~said the~~ at least one electrical circuit while leaving a peripheral portion of ~~said the~~ circuit side free of ~~said the~~ first material, ~~said the~~ first

plastic casting having an exposed surface and clamping ~~said the~~ frame, the substrate and the first plastic casting between a first plate and a second plate of a second molding assembly, at least a portion of ~~said the~~ exposed surface of ~~said the~~ first plastic casting compressed for sealingly engaging a portion of ~~said the~~ back side of ~~said the~~ substrate against ~~said the~~ first plate of ~~said the~~ second molding assembly, ~~said the~~ first plate and ~~said the~~ second plate of ~~said the~~ second molding assembly forming a second mold cavity for injecting a second material into ~~said the~~ second mold cavity for molding a second plastic casting surrounding ~~said the~~ first plastic casting and enclosing the peripheral portion of the circuit side and an edge of ~~said the~~ substrate, the second plastic casting having a peripheral outer edge; and
singulating ~~said the~~ substrate from ~~said the~~ frame.

19. (Currently Amended) A The method of claim 18, wherein ~~said the~~ second molding assembly leaves ~~said the~~ back side of ~~said the~~ substrate substantially free of ~~said the~~ second material.

20. (Currently Amended) A The method of claim 18, further comprising:
applying antifiash material to ~~said the~~ back side of ~~said the~~ substrate prior to clamping in ~~said the~~ second molding assembly.

21. (Currently Amended) A The method of claim 20, wherein ~~said the~~ antifiash material comprises a film.

22. (Currently Amended) A The method of claim 18, wherein ~~said the~~ substrate has peripheral edges thereabout, and ~~said the~~ at least one connecting segment comprises at least one connecting segment on each of two opposed peripheral edges of ~~said the~~ substrate.

23. (Currently Amended) A-The method of claim 18, wherein-~~said~~ the at least one electrical circuit includes at least one semiconductor component mounted on-~~said~~ the circuit side.

24. (Currently Amended) A-The method of claim 18, wherein-~~said~~ the first plastic casting and-~~said~~ the second plastic casting each comprise an epoxy resin.

25. (Currently Amended) A-The method of claim 18, wherein-~~said~~ the first material and-~~said~~ the second material each comprise a different resin.

26. (Currently Amended) A-The method of claim 18, wherein-~~said~~ the substrate comprises a reinforced organic polymer resin.

27. (Currently Amended) A-The method of claim 18, further comprising: subjecting-~~said~~ the first plastic casting to a curing step prior to clamping in-~~said~~ the second molding assembly.

28. (Currently Amended) A-The method of claim 18, further comprising: subjecting-~~said~~ the second plastic casting to a curing step after removal from-~~said~~ the second molding assembly.

29. (Currently Amended) A-The method of claim 18, wherein-~~said~~ the first molding apparatus assembly and-~~said~~ the second molding apparatus assembly each comprise transfer molds.

30. (Currently Amended) A-The method of claim 18, wherein-~~said~~ the at least one connector is mounted on-~~said~~ the back side of-~~said~~ the substrate.

31. (Currently Amended) A-The method of claim 18, wherein-~~said~~ the second molding-~~apparatus~~ assembly is configured to form-~~said~~ the second plastic casting having an inner peripheral portion contiguous with-~~said~~ the exposed surface of-~~said~~ the first plastic casting, and an outer peripheral portion displaced from-~~said~~ the exposed surface for attachment of a label covering an interface between-~~said~~ the first plastic casting and-~~said~~ the second plastic casting.

32. (Currently Amended) A-The method of claim 18, comprising:
forming a notch in-~~said~~ the second plastic casting during-~~said~~ the molding thereof configured to enclose an exposed end of a connecting segment following singulation thereof.

33. (Currently Amended) A-The method of claim 32, wherein-~~said~~ molding of-~~said~~ the second plastic casting is performed by placing a pin in contact with-~~said~~ the at least one connecting segment to form the notch.

34. (Currently Amended) A-The method of claim 32, wherein-~~said~~ the singulation comprises cutting-~~said~~ the connecting segment within-~~said~~ the notch.

35. (Currently Amended) A-The method of claim 34, wherein-~~said~~ the singulation comprises cutting-~~said~~ the connecting segment with a cutter die.

36. (Currently Amended) A-The method of claim 18, wherein-~~said~~ the second plastic casting is formed by compressing-~~said~~ the frame and-~~said~~ the substrate in-~~said~~ the second molding-~~apparatus~~ assembly with-~~said~~ the first plastic casting compressed for sealingly depressing-~~said~~ the substrate to a displaced position relative to-~~said~~ the frame.

37. (Currently Amended) A-The method of claim 36, wherein-~~said~~ the second mold cavity provides for molding of laterally extending wings from a central portion of-~~said~~ the peripheral outer edge of-~~said~~ the second plastic casting,-~~said~~ the wings extending outwardly beyond-~~said~~ the peripheral outer edge.

38. (Currently Amended) A-The method of claim 36, wherein-~~said~~ the displaced position provides encapsulation of-~~said~~ the at least one connecting segment within-~~said~~ the second plastic casting.

39. (Currently Amended) A-The method of claim 37, wherein-~~said~~ singulation singulating comprises cutting-~~said~~ the wings and-~~said~~ the at least one connecting segment from ~~said~~ the second plastic casting along-~~said~~ the peripheral outer edge thereof.

40. (Currently Amended) A-The method of claim 39, wherein-~~said~~ the wings and-~~said~~ the at least one connecting segment are cut from-~~said~~ the second plastic casting with a saw.

41. (Currently Amended) A-The method of claim 39, wherein-~~said~~ the wings and-~~said~~ the at least one connecting segment are cut from-~~said~~ the second plastic casting by stamping with a cutter die.

42. (Currently Amended) A-The method of claim 18, further comprising: removing extraneous hardened plastic attached to-~~said~~ the first plastic casting.

43. (Currently Amended) A-The method of claim 18, further comprising: removing extraneous hardened plastic attached to-~~said~~ the second plastic casting.

44. (Currently Amended) A method for fabricating a semiconductor card having a substrate having at least one circuit formed thereon and at least one connector from-a-a a plurality

of spaced-apart substrates ~~in~~ in a strip form, ~~said the~~ strip having a plurality of peripheral openings defining ~~said the plurality of~~ substrates and a plurality of connecting segments attaching ~~said the plurality of~~ substrates to ~~said the~~ strip, ~~said the~~ method comprising:
mounting a card circuit on each substrate of ~~said the~~ plurality of spaced-apart substrates, each card circuit comprising at least one semiconductor component and apparatus for communication between each ~~said~~ card circuit and an external circuit;
molding first plastic castings to ~~said the plurality of~~ substrates using a first molding assembly comprising a plurality of mold cavities for forming a first plastic casting over each circuit while leaving a peripheral portion of each substrate uncovered and molding second plastic castings encapsulating ~~said the~~ peripheral portions of ~~said the plurality of~~ substrates;
removing ~~said the~~ strip from ~~said the~~ second molding assembly; and
severing ~~said the plurality of~~ connecting segments to singulate individual semiconductor cards from ~~said the~~ strip.

45. (Currently Amended) A ~~The~~ method of claim 44, wherein each of ~~said the~~ plurality of substrates has first and second planar sides, ~~said the~~ card circuit mounted on ~~said the~~ first side and including conductors connected to ~~said the~~ ~~communication~~ apparatus mounted for communication on ~~said the~~ second side.

46. (Currently Amended) A ~~The~~ method of claim 44, wherein ~~said the~~ apparatus for communication ~~means~~ comprises conductive contacts.

47. (Currently Amended) A ~~The~~ method of claim 45, wherein ~~said the~~ first plastic casting is configured to be compressed by a first mold plate to force ~~said the~~ second side of each substrate against a second mold plate during molding of ~~said the~~ second plastic casting.

48. (Currently Amended) A method of fabricating a ~~card~~ substrate having a circuit side and a back side, ~~said the~~ substrate generally separated from a surrounding frame by a peripheral opening spanned by at least one connecting segment between ~~said the~~ substrate and ~~said the~~ frame, ~~said the~~ substrate having an electrical circuit and at least one external connector for communicating between ~~said the~~ electrical circuit and an external circuit, ~~said the~~ method comprising:

placing ~~said the~~ substrate ~~and~~ and the frame in a first molding assembly for injecting a first material into a first mold cavity formed by first and second plates to mold a first plastic casting onto ~~said the~~ circuit side of said the substrate and to encapsulate ~~said the~~ electrical circuit while leaving a peripheral portion of ~~said the~~ circuit side uncovered, ~~said the~~ first plastic casting having an exposed surface;

removing ~~said the~~ frame, the substrate and the first plastic casting from ~~said the~~ first molding assembly;

placing ~~said the~~ frame, the substrate and the first plastic casting between first and second plates of a second molding assembly, ~~said the~~ exposed surface of said the first plastic casting compressed for sealingly engaging ~~said the~~ back side of said the substrate against one of ~~said the~~ first plate and ~~said the~~ second plate of said the second molding assembly for injecting a second material into a second mold cavity of ~~said the~~ second molding assembly to mold a second plastic casting surrounding ~~said the~~ first plastic casting and enclosing ~~said the~~ uncovered peripheral portion and an edge of said the substrate, ~~said the~~ second plastic casting having a peripheral outer edge; and

removing ~~said the~~ frame, the substrate and the first and second plastic castings from ~~said the~~ second molding assembly.

49. (Currently Amended) A ~~The~~ method of claim 48, further comprising:
singulating ~~said the~~ substrate with the attached first and second plastic castings from ~~said the~~ frame.

50. (Currently Amended) A-The method of claim 48, wherein ~~said~~ molding leaves ~~said the~~ back side of ~~said the~~ substrate substantially uncovered.

51. (Currently Amended) A-The method of claim 48, further comprising ~~the step of~~ applying antifrash material to ~~said the~~ back side of ~~said the~~ substrate prior to clamping in ~~said the~~ second molding assembly.

52. (Currently Amended) A-The method of claim 51, wherein ~~said the~~ antifrash material comprises a film.

53. (Currently Amended) A-The method of claim 48, wherein ~~said the~~ substrate has peripheral edges thereabout, and ~~said the~~ at least one connecting segment comprises at least one connecting segment on each of two opposed peripheral edges of ~~said the~~ substrate.

54. (Currently Amended) A-The method of claim 48, wherein ~~said the~~ electrical circuit includes at least one semiconductor component mounted on ~~said the~~ circuit side of ~~said the~~ substrate.

55. (Currently Amended) A-The method of claim 48, wherein ~~said the~~ first and second plastic castings comprise epoxy resins.

56. (Currently Amended) A-The method of claim 48, wherein ~~said the~~ first material and ~~said the~~ second material comprise different resins.

57. (Currently Amended) A-The method of claim 48, wherein ~~said the~~ substrate comprises a reinforced organic polymer resin.

58. (Currently Amended) A-The method of claim 48, further comprising subjecting ~~said the~~ first plastic casting to a curing step prior to clamping in-~~said the~~ second molding assembly.

59. (Currently Amended) A-The method of claim 48, further comprising subjecting ~~said the~~ second plastic casting to a curing process after removal from-~~said the~~ second molding assembly.

60. (Currently Amended) A-The method of claim 48, wherein-~~said the~~ first molding assembly and-~~said the~~ second molding assembly each comprise transfer molds.

61. (Currently Amended) A-The method of claim 48, wherein-~~said the~~ at least one external connector is mounted on-~~said the~~ back side of-~~said the~~ substrate.

62. (Currently Amended) A-The method of claim 48, wherein-~~said the~~ second molding assembly is configured to form-~~said the~~ second plastic casting with an inner peripheral portion contiguous with-~~said the~~ exposed surface of-~~said the~~ first plastic casting and an outer peripheral portion displaced from-~~said the~~ exposed surface for attachment of a label covering an interface between-~~said the~~ first plastic casting and-~~said the~~ second plastic casting.

63. (Currently Amended) A-The method of claim 48, further comprising: forming a notch in-~~said the~~ second plastic casting during ~~said~~-molding thereof configured to enclose an exposed end of a connecting segment following singulation.

64. (Currently Amended) A-The method of claim 63, wherein ~~said~~-molding of-~~said the~~ second plastic casting is performed by placing a pin in contact with-~~said the~~ connecting segment to form-~~said the~~ notch.

65. (Currently Amended) A-The method of claim 63, wherein-~~said~~ the singulation comprises cutting-~~said~~ the connecting segment within-~~said~~ the notch.

66. (Currently Amended) A-The method of claim 49, wherein-~~said~~ singulation singulating comprises cutting-~~said~~ the at least one connecting segment with a cutter die.

67. (Currently Amended) A-The method of claim 48, wherein-~~said~~ the second plastic casting is formed by compressing-~~said~~ the frame, the substrate and the first plastic casting in-~~said~~ the second molding-~~apparatus~~ assembly with-~~said~~ the second mold cavity wherein-~~said~~ the first plastic casting is compressed for sealingly depressing-~~said~~ the substrate to a displaced position relative to-~~said~~ the frame.

68. (Currently Amended) A-The method of claim 67, wherein-~~said~~ the second mold cavity of-~~said~~ the second molding-~~apparatus~~ assembly provides for molding of laterally extending wings from a central portion of-~~said~~ the peripheral outer edge of-~~said~~ the second plastic casting, ~~said~~ the wings extending outwardly beyond-~~said~~ the peripheral outer edge.

69. (Currently Amended) A-The method of claim 68, wherein-~~said~~ the displaced position provides encapsulation of-~~said~~ the at least one connecting segment within-~~said~~ the second plastic casting.

70. (Currently Amended) A-The method of claim-~~65, 68,~~ wherein ~~said~~ singulation comprises cutting-~~said~~ the wings and-~~said~~ the at least one connecting segment from-~~said~~ the second plastic casting along-~~said~~ the peripheral outer edge thereof.

71. (Currently Amended) A-The method of claim 70, wherein-~~said~~ the wings and-~~said~~ the at least one connecting segment are cut from-~~said~~ the second plastic casting with a saw.

72. (Currently Amended) A-~~The~~ method of claim 68, wherein-~~said the~~ wings and-~~said the~~ at least one connecting segment are cut from-~~said the~~ second plastic casting by stamping with a cutter die.

73. (Currently Amended) A-~~The~~ method of claim 48, further comprising removing extraneous hardened plastic attached to-~~said the~~ first plastic casting before-~~said~~ molding of-~~said the~~ second plastic casting.

74. (Currently Amended) A-~~The~~ method of claim 48 further comprising removing extraneous hardened plastic attached to-~~said the~~ second plastic casting following ~~said~~-molding thereof.

75. (Currently Amended) A method for fabricating a card comprising:
providing a substrate having a circuit side and a back side, ~~said the~~ substrate having a first portion thereof having a peripheral edge separated from a second portion of-~~said the~~ substrate by a peripheral opening spanned by at least one connecting segment between ~~said the~~ first portion of-~~said the~~ substrate and-~~said the~~ second portion of-~~said the~~ substrate;
placing-~~said the~~ substrate between a first plate and a second plate of a first molding assembly, ~~said the~~ first plate and-~~said the~~ second plate forming a first mold cavity for injecting a first material into-~~said the~~ first mold cavity for molding a first plastic casting onto at least a portion of-~~said the~~ circuit side of the substrate and leaving a peripheral portion of-~~said the~~ circuit side free of-~~said the~~ first material, ~~said the~~ first plastic casting having an exposed surface; and
placing-~~said the~~ second portion of-~~said the~~ substrate and-~~said the~~ first plastic casting between a first plate and a second plate of a second molding assembly with at least a portion of-~~said the~~ back side of-~~said the~~ substrate engaging a portion of-~~said the~~ first plate of-~~said the~~ second molding assembly, ~~said the~~ first plate and-~~said the~~ second plate of-~~said the~~ second molding assembly forming a second mold cavity for injecting a second material into-~~said~~

the second mold cavity for molding a second plastic casting surrounding ~~said~~ the first plastic casting and enclosing ~~said~~ the peripheral edge of ~~said~~ the first portion of ~~said~~ the substrate, ~~said~~ the second plastic casting having a peripheral outer edge.

76. (Currently Amended) The method of claim 75, further comprising:
removing ~~said frame and~~ the substrate from ~~said~~ the second molding assembly; and
singulating ~~said~~ the substrate ~~from said frame~~.

77. (Currently Amended) A ~~The~~ The method of claim 75, wherein ~~said~~ molding of ~~said~~ the second plastic casting leaves ~~said~~ the back side of ~~said~~ the substrate substantially free of ~~said~~ the second material.

78. (Currently Amended) A ~~The~~ The method of claim 75, further comprising:
applying antflash material to ~~said~~ the back side of ~~said~~ the substrate prior to clamping in ~~said~~ the second molding assembly.

79. (Currently Amended) A ~~The~~ The method of claim 78, wherein ~~said~~ the antflash material comprises a film.

80. (Currently Amended) A ~~The~~ The method of claim 75, wherein ~~said~~ the substrate includes at least one circuit and at least one connector.

81. (Currently Amended) A ~~The~~ The method of claim 75, wherein ~~said~~ the first plastic casting and ~~said~~ the second plastic casting each comprise an epoxy resin.

82. (Currently Amended) A ~~The~~ The method of claim 75, wherein ~~said~~ the first material and ~~said~~ the second material each comprise a different resin.

83. (Currently Amended) A-The method of claim 75, wherein-~~said~~ the substrate comprises a reinforced organic polymer resin.

84. (Currently Amended) A-The method of claim 75, further comprising: subjecting-~~said~~ the first plastic casting to curing.

85. (Currently Amended) A-The method of claim 75, further comprising: subjecting-~~said~~ the second plastic casting to curing.

86. (Currently Amended) A-The method of claim 75, wherein-~~said~~ the first molding apparatus assembly and-~~said~~ the second molding-~~apparatus~~ assembly each comprise transfer molds.

87. (Currently Amended) A-The method of claim 75, wherein-~~said~~ the second molding-~~apparatus~~ assembly is configured to form a second plastic casting having an inner peripheral portion contiguous with-~~said~~ the exposed surface of-~~said~~ the first plastic casting and an outer peripheral portion displaced from-~~said~~ the exposed surface for attachment of a label covering an interface between-~~said~~ the first plastic casting and-~~said~~ the second plastic casting.

88. (Currently Amended) A-The method of claim 75, comprising: forming a notch in-~~said~~ the second plastic casting to enclose an exposed end of a connecting segment.

89. (Currently Amended) A-The method of claim 75, further comprising: placing a pin in contact with-~~said~~ the at least one connecting segment for forming a notch.

90. (Currently Amended) A-The method of claim 76, wherein-~~said~~ singulation singulating comprises cutting-~~said~~ the at least one connecting segment.

91. (Currently Amended) A ~~The~~ method of claim 76, wherein ~~said singulation~~ singulating comprises cutting ~~said the~~ at least one connecting segment with a cutter die.

92. (Currently Amended) A ~~The~~ method of claim 75, wherein ~~said the~~ second plastic casting is formed by compressing ~~said frame and said the~~ substrate in ~~said the~~ second molding apparatus assembly with ~~said the~~ first plastic casting compressed for sealingly depressing ~~said the~~ substrate to a displaced position relative to ~~said the~~ second portion of ~~said the~~ substrate.

93. (Currently Amended) A ~~The~~ method of claim 92, wherein ~~said the~~ second mold cavity provides for molding of laterally extending wings from a central portion of ~~said the~~ peripheral outer edge of ~~said the~~ second plastic casting, ~~said the~~ wings extending outwardly beyond ~~said the~~ peripheral outer edge.

94. (Currently Amended) A ~~The~~ method of claim 92, wherein ~~said the~~ displaced position provides encapsulation of ~~said the~~ at least one connecting segment within ~~said the~~ second plastic casting.

95. (Currently Amended) A ~~The~~ method of claim ~~76, 93~~, wherein ~~said singulation~~ comprises cutting ~~said the~~ wings and ~~said the~~ at least one connecting segment from ~~said the~~ second plastic casting along ~~said the~~ peripheral outer edge thereof.

96. (Currently Amended) A method for fabricating a card in a first molding assembly having a first plate and a second plate forming a first mold cavity and a second molding assembly having a first plate and a second plate forming a second mold cavity, ~~said the~~ card having a substrate having a circuit side and a back side, ~~said the~~ substrate generally separated from a surrounding frame by a peripheral opening spanned by at least one connecting segment between ~~said the~~ substrate and ~~said the~~ frame, ~~said the~~ substrate having at least one electrical circuit and at

least one connector for communicating between ~~said the~~ at least one electrical circuit and an external circuit, comprising:

placing ~~said the~~ substrate and ~~said the~~ frame between ~~said the~~ first plate and ~~said the~~ second plate of ~~said the~~ first molding assembly for engaging at least portions of ~~said the~~ first plate and at least portions of ~~said the~~ second plate of ~~said the~~ first molding assembly with at least portions of ~~said the~~ substrate and ~~said the~~ frame for injecting a first material into ~~said the~~ first mold cavity for molding a first plastic casting onto ~~said the~~ circuit side of ~~said the~~ substrate and encapsulating ~~said the~~ at least one electrical circuit while leaving a peripheral portion of ~~said the~~ circuit side free of ~~said the~~ first material, ~~said the~~ first plastic casting having an exposed surface;

placing ~~said the~~ frame, substrate and first plastic casting between ~~said the~~ first plate and ~~said the~~ second plate of ~~said the~~ second molding assembly, at least a portion of ~~said the~~ exposed surface of ~~said the~~ first plastic casting compressed for sealingly engaging a portion of ~~said the~~ back side of ~~said the~~ substrate against ~~said the~~ first plate of ~~said the~~ second molding assembly for injecting a second material into ~~said the~~ second mold cavity for molding a second plastic casting surrounding ~~said the~~ first plastic casting and enclosing ~~said the~~ peripheral portion of circuit side and an edge of ~~said the~~ substrate, ~~said the~~ second plastic casting having a peripheral outer edge; and

singulating ~~said the~~ substrate from ~~said the~~ frame.

97. (Currently Amended) The method of claim-1, 96, wherein ~~said the~~ second molding assembly leaves ~~said the~~ back side of ~~said the~~ substrate substantially free of ~~said the~~ second material.

98. (Currently Amended) The method of claim 96, further comprising:
applying antifeash material to ~~said the~~ back side of ~~said the~~ substrate prior to clamping in ~~said the~~ second molding assembly.

99. (Currently Amended) The method of claim 98, wherein ~~said~~ the antflash material comprises a film.

100. (Currently Amended) The method of claim 96, wherein ~~said~~ the substrate has peripheral edges thereabout, and ~~said~~ the at least one connecting segment comprises at least one connecting segment on each of two opposed peripheral edges of ~~said~~ the substrate.

101. (Currently Amended) The method of claim 96, wherein ~~said~~ the at least one electrical circuit includes at least one semiconductor component mounted on ~~said~~ the circuit side of ~~said~~ the substrate.

102. (Currently Amended) The method of claim 96, wherein ~~said~~ the first plastic casting and ~~said~~ the second plastic casting each comprise an epoxy resin.

103. (Currently Amended) The method of claim 96, wherein ~~said~~ the first material and ~~said~~ the second material each comprise a different resin.

104. (Currently Amended) The method of claim 96, wherein ~~said~~ the substrate comprises a reinforced organic polymer resin.

105. (Currently Amended) The method of claim 96, further comprising:
subjecting ~~said~~ the first plastic casting to a curing step prior to clamping in ~~said~~ the second molding assembly.

106. (Currently Amended) The method of claim 96, further comprising:
subjecting ~~said~~ the second plastic casting to a curing step after removal from ~~said~~ the second molding assembly.

107. (Currently Amended) The method of claim 96, wherein ~~said~~ the first molding apparatus assembly and ~~said~~ the second molding apparatus assembly each comprise transfer molds.

108. (Currently Amended) The method of claim 96, wherein ~~said~~ the at least one connector is mounted on ~~said~~ the back side of ~~said~~ the substrate.

109. (Currently Amended) The method of claim 96, wherein ~~said~~ the second molding apparatus assembly is configured to form ~~said~~ the second plastic casting to have an inner peripheral portion contiguous with ~~said~~ the exposed surface of ~~said~~ the first plastic casting and an outer peripheral portion displaced from ~~said~~ the exposed surface for attachment of a label covering an interface between ~~said~~ the first plastic casting and ~~said~~ the second plastic casting.

110. (Currently Amended) The method of claim 96, comprising:
forming a notch in ~~said~~ the second plastic casting during ~~said~~ molding thereof configured to enclose an exposed end of a connecting segment following singulation thereof.

111. (Currently Amended) The method of claim 110, wherein ~~said~~ molding of ~~said~~ the second plastic casting is performed by placing a pin in contact with ~~said~~ the at least one connecting segment to form the notch.

112. (Currently Amended) The method of claim 110, wherein ~~said~~ the singulation comprises cutting ~~said~~ the connecting segment within ~~said~~ the notch.

113. (Currently Amended) The method of claim 112, wherein ~~said~~ the singulation further comprises cutting ~~said~~ the connecting segment with a cutter die.

114. (Currently Amended) The method of claim 96, wherein ~~said~~ the second plastic casting is formed by compressing ~~said~~ the frame and ~~said~~ the substrate in ~~said~~ the second molding ~~apparatus assembly~~ with ~~said~~ the first plastic casting compressed for sealingly depressing ~~said~~ the substrate to a displaced position relative to ~~said~~ the frame.

115. (Currently Amended) The method of claim 114, wherein ~~said~~ the second mold cavity provides for molding of laterally extending wings from a central portion of ~~said~~ the peripheral outer edge of ~~said~~ the second plastic casting, ~~said~~ the wings extending outwardly beyond ~~said~~ the peripheral outer edge.

116. (Currently Amended) The method of claim 114, wherein ~~said~~ the displaced position provides encapsulation of ~~said~~ the at least one connecting segment within ~~said~~ the second plastic casting.

117. (Currently Amended) The method of claim 115, wherein ~~said singulation~~ singulating comprises cutting ~~said~~ the wings and ~~said~~ the at least one connecting segment from ~~said~~ the second plastic casting along ~~said~~ the peripheral outer edge thereof.

118. (Currently Amended) The method of claim 117, wherein ~~said~~ the wings and ~~said~~ the at least one connecting segment are cut from ~~said~~ the second plastic casting with a saw.

119. (Currently Amended) The method of claim 117, wherein ~~said~~ the wings and ~~said~~ the at least one connecting segment are cut from ~~said~~ the second plastic casting by stamping with a cutter die.

120. (Currently Amended) The method of claim 96, further comprising:
removing extraneous hardened plastic attached to ~~said~~ the first plastic casting.

121. (Currently Amended) The method of claim 96, further comprising:
removing extraneous hardened plastic attached to ~~said~~ the second plastic casting.

122. (Currently Amended) A method for fabricating a plurality of semiconductor cards using a plurality of substrates ~~in in a strip form~~ having a plurality of spaced-apart substrates, ~~said the strip~~ comprising a plurality of peripheral openings defining ~~said the plurality of~~ substrates and a plurality of connecting segments attaching ~~said the plurality of~~ substrates to ~~said the~~ strip, each substrate of ~~said the~~ plurality having at least one circuit thereon and at least one connector, ~~said the method~~ comprising:

mounting a card circuit on each substrate of ~~said the~~ plurality, each card circuit comprising at least one semiconductor component and apparatus for communication between each ~~said~~ card circuit and an external circuit;

molding first plastic castings to ~~said the plurality of~~ substrates using a first molding assembly comprising a plurality of mold cavities for forming a first plastic casting over each card circuit while leaving a peripheral portion of each substrate uncovered;

molding second plastic castings to ~~said the plurality of~~ substrates using a second molding assembly comprising a plurality of mold cavities for forming a second plastic casting encapsulating ~~said the~~ peripheral portions of ~~said the plurality of~~ substrates; and

forming singulated individual semiconductor cards from ~~said the~~ strip.

123. (Currently Amended) The method of claim 122, wherein each of ~~said the plurality of~~ substrates has first and second planar sides, ~~said the~~ card circuit mounted on ~~said the~~ first side and including conductors connected to ~~said the apparatus for~~ communication ~~means~~ mounted on ~~said the~~ second side.

124. (Currently Amended) The method of claim 122, wherein ~~said the apparatus for~~ communication ~~means~~ comprises conductive contacts.

125. (Currently Amended) The method of claim 123, wherein ~~said~~ the first plastic casting is configured to be compressed by a first mold plate to force ~~said~~ the second side of each substrate against a second mold plate during molding of ~~said~~ the second plastic casting.

126. (Currently Amended) A method of fabricating a card in a first molding assembly and a second molding assembly, ~~said~~ the card having a circuit side, a back side, and a substrate generally separated from a surrounding frame by a peripheral opening spanned by at least one connecting segment between ~~said~~ the substrate and ~~said~~ the frame, ~~said~~ the substrate having an electrical circuit and at least one external connector for communicating between ~~said~~ the electrical circuit and an external circuit, ~~said~~ the method comprising:

placing ~~said~~ the substrate and the frame between first and second plates of ~~said~~ the first molding assembly for engaging at least portions of ~~said~~ the substrate and the frame with at least portions of ~~said~~ the first molding assembly for injecting a first material into a first mold cavity formed by ~~said~~ the first and second plates to mold a first plastic casting onto a circuit side of ~~said~~ the substrate and encapsulate ~~said~~ the electrical circuit while leaving a peripheral portion of ~~said~~ the circuit side uncovered, ~~said~~ the first plastic casting having an exposed surface;

placing ~~said~~ the frame, the substrate and the first plastic casting between first and second plates of ~~said~~ the second molding assembly, ~~said~~ the exposed surface of ~~said~~ the first plastic casting compressed for sealingly engaging a back side of ~~said~~ the substrate against one of ~~said~~ the first plate and ~~said~~ the second plate of ~~said~~ the second molding assembly for injecting a second material into a second mold cavity of ~~said~~ the second molding assembly to mold a second plastic casting surrounding ~~said~~ the first plastic casting and enclosing ~~said~~ the uncovered peripheral portion and an edge of ~~said~~ the substrate, ~~said~~ the second plastic casting having a peripheral outer edge; and

removing ~~said~~ the frame, the substrate and the first and second plastic castings from ~~said~~ the first molding assembly and ~~said~~ the second molding assembly when molding is finished in the first molding assembly and the second molding assembly.

127. (Currently Amended) The method of claim 126, further comprising:
singulating ~~said~~ the substrate with the attached first and second plastic castings from ~~said~~ the
frame.

128. (Currently Amended) The method of claim 126, wherein ~~said~~ molding leaves ~~said~~
the back side of ~~said~~ the substrate substantially uncovered.

129. (Currently Amended) The method of claim 126, further comprising ~~the step of~~
applying antifrash material to ~~said~~ the back side of ~~said~~ the substrate prior to clamping in ~~said~~ the
second molding assembly.

130. (Currently Amended) The method of claim 129, wherein ~~said~~ the antifrash
material comprises a film.

131. (Currently Amended) The method of claim 126, wherein ~~said~~ the substrate has
peripheral edges thereabout, and ~~said~~ the at least one connecting segment comprises at least one
connecting segment on each of two opposed peripheral edges of ~~said~~ the substrate.

132. (Currently Amended) The method of claim 126, wherein ~~said~~ the electrical circuit
includes at least one semiconductor component mounted on ~~said~~ the circuit side of ~~said~~ the
substrate.

133. (Currently Amended) The method of claim 126, wherein ~~said~~ the first and second
plastic castings comprise epoxy resins.

134. (Currently Amended) The method of claim 126, wherein ~~said~~ the first material
and ~~said~~ the second material comprise different resins.

135. (Currently Amended) The method of claim 126, wherein ~~said~~ the substrate comprises a reinforced organic polymer resin.

136. (Currently Amended) The method of claim 126, further comprising subjecting ~~said~~ the first plastic casting to a curing step prior to clamping in ~~said~~ the second molding assembly.

137. (Currently Amended) The method of claim 126, further comprising subjecting ~~said~~ the second plastic casting to a curing process after removal from ~~said~~ the second molding assembly.

138. (Currently Amended) The method of claim 126, wherein ~~said~~ the first molding assembly and ~~said~~ the second molding assembly each comprise transfer molds.

139. (Currently Amended) The method of claim 126, wherein ~~said~~ the at least one external connector is mounted on ~~said~~ the back side of ~~said~~ the substrate.

140. (Currently Amended) The method of claim 126, wherein ~~said~~ the second molding assembly is configured to form ~~said~~ the second plastic casting with an inner peripheral portion contiguous with ~~said~~ the exposed surface of ~~said~~ the first plastic casting and an outer peripheral portion displaced from ~~said~~ the exposed surface for attachment of a label covering an interface between ~~said~~ the first plastic casting and ~~said~~ the second plastic casting.

141. (Currently Amended) The method of claim 127, further comprising:
forming a notch in ~~said~~ the second plastic casting during ~~said~~ molding thereof configured to enclose an exposed end of a connecting segment following singulation.

142. (Currently Amended) The method of claim 141, wherein ~~said~~ molding of ~~said~~ the second plastic casting is performed by placing a pin in contact with ~~said~~ the connecting segment to form ~~said~~ the notch.

143. (Currently Amended) The method of claim ~~46~~, 127, wherein ~~said~~ singulation singulating comprises cutting ~~said~~ the connecting segment within ~~said~~ the notch.

144. (Currently Amended) The method of claim 127, wherein ~~said~~ singulation singulating comprises cutting ~~said~~ the at least one connecting segment with a cutter die.

145. (Currently Amended) The method of claim 126, wherein ~~said~~ the second plastic casting is formed by compressing ~~said~~ the frame, the substrate and the first plastic casting in ~~said~~ the second molding ~~apparatus~~ assembly with ~~said~~ the second mold cavity wherein ~~said~~ the first plastic casting is compressed for sealingly depressing ~~said~~ the substrate to a displaced position relative to ~~said~~ the frame.

146. (Currently Amended) The method of claim 145, wherein ~~said~~ the mold cavity of ~~said~~ the second molding ~~apparatus~~ assembly provides for molding of laterally extending wings from a central portion of ~~said~~ the peripheral outer edge of ~~said~~ the second plastic casting, ~~said~~ the wings extending outwardly beyond ~~said~~ the peripheral outer edge.

147. (Currently Amended) The method of claim 146, wherein ~~said~~ the displaced position provides encapsulation of ~~said~~ the at least one connecting segment within ~~said~~ the second plastic casting.

148. (Currently Amended) The method of claim ~~145~~, 146, wherein ~~said~~ singulation comprises cutting ~~said~~ the wings and ~~said~~ the at least one connecting segment from ~~said~~ the second plastic casting along ~~said~~ the peripheral outer edge thereof.

149. (Currently Amended) The method of claim 148, wherein ~~said~~ the wings and ~~said~~ the at least one connecting segment are cut from ~~said~~ the second plastic casting with a saw.

150. (Currently Amended) The method of claim 146, wherein ~~said~~ the wings and ~~said~~ the at least one connecting segment are cut from ~~said~~ the second plastic casting by stamping with a cutter die.

151. (Currently Amended) The method of claim 126, further comprising removing extraneous hardened plastic attached to ~~said~~ the first plastic casting before ~~said~~ molding of ~~said~~ the second plastic casting.

152. (Currently Amended) The method of claim ~~126~~ 126, further comprising removing extraneous hardened plastic attached to ~~said~~ the second plastic casting following ~~said~~ molding thereof.

153. (Currently Amended) A method for fabricating a card having a substrate having a circuit side and a back side, ~~said~~ the substrate having a first portion thereof having a peripheral edge separated from a second portion of ~~said~~ the substrate by a peripheral opening spanned by at least one connecting segment between ~~said~~ the first portion of ~~said~~ the substrate and ~~said~~ the second portion of ~~said~~ the substrate in a first molding assembly and a second molding assembly comprising:

placing ~~said~~ the substrate between a first plate and a second plate of ~~said~~ the first molding assembly, ~~said~~ the first plate and ~~said~~ the second plate forming a first mold cavity for engaging at least a portion of ~~said~~ the substrate by portions of ~~said~~ the first plate and portions of ~~said~~ the second plate for injecting a first material into ~~said~~ the first mold cavity for molding a first plastic casting onto at least a portion of ~~said~~ the circuit side of ~~said~~ the substrate and leaving a peripheral portion of ~~said~~ the circuit side free of ~~said~~ the first material, ~~said~~ the first plastic casting having an exposed surface; and

placing ~~said the~~ second portion of ~~said the~~ substrate and ~~said the~~ first plastic casting between a first plate and a second plate of ~~said the~~ second molding assembly with at least a portion of ~~said the~~ back side of ~~said the~~ substrate engaging a portion of ~~said the~~ first plate of ~~said the~~ second molding assembly, ~~said the~~ first plate and ~~said the~~ second plate of ~~said the~~ second molding assembly forming a second mold cavity for injecting a second material into ~~said the~~ second mold cavity for molding a second plastic casting surrounding ~~said the~~ first plastic casting and enclosing ~~said the~~ peripheral edge of ~~said the~~ first portion of ~~said the~~ substrate, ~~said the~~ second plastic casting having a peripheral outer edge.

154. (Currently Amended) The method of claim 153, further comprising:
removing ~~said the~~ substrate from ~~said the~~ second molding assembly; and
singulating ~~said the~~ substrate.

155. (Currently Amended) The method of claim 153, wherein ~~said~~-molding of ~~said the~~ second plastic casting leaves ~~said the~~ back side of ~~said the~~ substrate substantially free of ~~said the~~ second material.

156. (Currently Amended) The method of claim 153, further comprising:
applying antflash material to ~~said the~~ back side of ~~said the~~ substrate prior to clamping in ~~said the~~ second molding assembly.

157. (Currently Amended) The method of claim 156, wherein ~~said the~~ antflash material comprises a film.

158. (Currently Amended) The method of claim 153, wherein ~~said the~~ substrate includes at least one circuit and at least one connector.

159. (Currently Amended) The method of claim 153, wherein ~~said~~ the first plastic casting and ~~said~~ the second plastic casting each comprise an epoxy resin.

160. (Currently Amended) The method of claim 153, wherein ~~said~~ the first material and ~~said~~ the second material each comprise a different resin.

161. (Currently Amended) The method of claim 153, wherein ~~said~~ the substrate comprises a reinforced organic polymer resin.

162. (Currently Amended) The method of claim 153, further comprising: subjecting ~~said~~ the first plastic casting to curing.

163. (Currently Amended) The method of claim 153, further comprising: subjecting ~~said~~ the second plastic casting to curing.

164. (Currently Amended) The method of claim 153, wherein ~~said~~ the first molding apparatus assembly and ~~said~~ the second molding apparatus assembly each comprise transfer molds.

165. (Currently Amended) The method of claim 153, wherein ~~said~~ the second molding apparatus assembly is configured to form a second plastic casting having an inner peripheral portion contiguous with ~~said~~ the exposed surface of ~~said~~ the first plastic casting and an outer peripheral portion displaced from ~~said~~ the exposed surface for attachment of a label covering an interface between ~~said~~ the first plastic casting and ~~said~~ the second plastic casting.

166. (Currently Amended) The method of claim 153, comprising: forming a notch in ~~said~~ the second plastic casting to enclose an exposed end of a connecting segment.

167. (Currently Amended) The method of claim 153, further comprising:
placing a pin in contact with ~~said~~ the at least one connecting segment for forming a notch.

168. (Currently Amended) The method of claim 154, wherein ~~said singulation~~
singulating comprises cutting ~~said~~ the at least one connecting segment.

169. (Currently Amended) The method of claim 154, wherein ~~said singulation~~
singulation comprises cutting ~~said~~ the at least one connecting segment with a cutter die.

170. (Currently Amended) The method of claim 153, wherein ~~said~~ the second plastic
casting is formed by compressing ~~said~~ the substrate in ~~said~~ the second molding ~~apparatus~~
assembly with ~~said~~ the first plastic casting compressed for sealingly depressing ~~said~~ the substrate
to a displaced position relative to ~~said~~ the second portion of ~~said~~ the substrate.

171. (Currently Amended) The method of claim 170, wherein ~~said~~ the second mold
cavity provides for molding of laterally extending wings from a central portion of ~~said~~ the
peripheral outer edge of ~~said~~ the second plastic casting, ~~said~~ the wings extending outwardly
beyond ~~said~~ the peripheral outer edge.

172. (Currently Amended) The method of claim 170, wherein ~~said~~ the displaced
position provides encapsulation of ~~said~~ the at least one connecting segment within ~~said~~ the
second plastic casting.

173. (Currently Amended) The method of claim ~~153, 171,~~ wherein ~~said~~ singulation
comprises cutting ~~said~~ the wings and ~~said~~ the at least one connecting segment from ~~said~~ the
second plastic casting along ~~said~~ the peripheral outer edge thereof.